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| APPLICATION NO.          | FILING DATE          | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|--------------------------|----------------------|----------------------|---------------------|------------------|--|
| 10/511,387               | 10/15/2004           | Jeongsoon Park       | PU020119            | 2095             |  |
| 7                        | 590 05/26/2006       |                      | EXAM                | INER             |  |
| Joseph S Tripoli         |                      |                      | BAYARD, EMMANUEL    |                  |  |
| Thomson Mult             | imedia Licensing Inc |                      |                     |                  |  |
| PO Box 5312              |                      |                      | ART UNIT            | PAPER NUMBER     |  |
| Princeton, NJ 08543-5312 |                      |                      | 2611                |                  |  |

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | ·   |  |  | Ar.         |
|--|---|--|--|-------------|
|  |   | Application No.  | Applicant(s)   | <del></del> |
|  |   | 10/511,387   | PARK ET AL.  |             |
| Office Action Summary  |   | Examiner   | Art Unit   |             |
|  |   | Emmanuel Bayard  | 2611   |             |
| Period fo  | The MAILING DATE of this communication ap<br>or Reply   | opears on the cover sheet wi   | th the correspondence add  | ress        |
| A SH<br>WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR REPI<br>CHEVER IS LONGER, FROM THE MAILING I<br>insions of time may be available under the provisions of 37 CFR 1<br>SIX (6) MONTHS from the mailing date of this communication.<br>O period for reply is specified above, the maximum statutory period<br>rere to reply within the set or extended period for reply will, by statu<br>reply received by the Office later than three months after the maili<br>ed patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNIC<br>.136(a). In no event, however, may a red<br>d will apply and will expire SIX (6) MON<br>tte, cause the application to become AB | CATION.  eply be timely filed  ITHS from the mailing date of this com  BANDONED (35 U.S.C. § 133). | •           |
| Status   |   |  |  |             |
| 1)⊠  | Responsive to communication(s) filed on 15  | October 2004.  |  |             |
| 2a)□   | · · · · · · · · · · · · · · · · · · ·   | is action is non-final.  |  |             |
| 3)□  | Since this application is in condition for allowa   |  | ers, prosecution as to the r   | merits is   |
|  | closed in accordance with the practice under  |  | •  |             |
| Disposit   | ion of Claims   |  |  |             |
| 4)⊠  | Claim(s) 1-25 is/are pending in the application   | n.   |  |             |
|  | 4a) Of the above claim(s) is/are withdra  |  |  |             |
|  | Claim(s) <u>1,2,4,8,9,12 and 13</u> is/are allowed.   |  |  |             |
|  | Claim(s) 10,11 and 14-25 is/are rejected.   |  |  |             |
|  | Claim(s) 3 and 5-7 is/are objected to.  |  |  |             |
|  | Claim(s) are subject to restriction and/  | or election requirement.   |  |             |
| Applicat   | ion Papers  |  |  |             |
|  | The specification is objected to by the Examin  | nor.   |  |             |
| · ·  | The drawing(s) filed on is/are: a) ac   |  | by the Evaminer  |             |
| .0/  | Applicant may not request that any objection to the   |  |  |             |
|  | Replacement drawing sheet(s) including the correct  |  | ` '  | 2 1 121/4\  |
| 11)  | The oath or declaration is objected to by the E   |  |  |             |
| Priority ι   | under 35 U.S.C. § 119   |  |  |             |
|  | Acknowledgment is made of a claim for foreig  | n priority under 35 U.S.C. &   | 119(a)-(d) or (f).   |             |
|  | ☐ All b)☐ Some * c)☐ None of:   |  | (4) (4) 5. (.).  |             |
|  | 1. Certified copies of the priority documen   | nts have been received.  |  |             |
|  | 2. Certified copies of the priority documen   |  | pplication No  |             |
|  | 3. Copies of the certified copies of the price  |  |  | tage        |
|  | application from the International Burea  |  |  |             |
| * 5  | See the attached detailed Office action for a lis   |  | received.  |             |
|  |   |  |  |             |
|  | •   |  |  |             |
| Attachmen  | • •   | _  |  |             |
|  | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)   |  | ummary (PTO-413)<br>)/Mail Date  |             |
| 3) 🔯 Inforr  | mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08   | 3) 5) 🔲 Notice of In   | nformal Patent Application (PTO-1  | 152)        |
| Pape   | r No(s)/Mail Date   | 6)   | <b>-</b> ∙   |             |

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### **DETAILED ACTION**

### Claim Objections

- 1. Claim 3 is objected to because of the following informalities: in line 3, replace "BER" with ---BYER---. Appropriate correction is required.
- 2. Claims 3 and 5-7 are also objected because they depend on a base objected claim.

# Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 10-11, 14-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. Claim 10 recites the limitation "said RS decoder" in line 3. There is insufficient antecedent basis for this limitation in the claim.
- 6. Claim 11 recites the limitation "said RS decoder" in line 3. There is insufficient antecedent basis for this limitation in the claim.
- 7. Claim 14 recites the limitation "said comparison signal" in line 3. There is insufficient antecedent basis for this limitation in the claim.
- 8. Claim 16 recites the limitation "the superior mode" in line 13. There is insufficient antecedent basis for this limitation in the claim.
- 9. Claim 25 recites the limitation "said lock signal" in line 3. There is insufficient antecedent basis for this limitation in the claim.

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10. Claims 15 and 17-24 are also rejected because they depend on a base rejected claim.

## Allowable Subject Matter

- 11. Claims 1-2, 4, 8-9 and 12-13 are allowed over the prior art of record.
- 12. Claims 10-11, 14-15 and 17-25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 13. Claim 16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
- 14. Claims 3, and 5-7 are objected, but would be allowable if rewritten in to overcome the above objection.

### Conclusion

- 15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Birru U.S. Pub No 2003/0099289 A1 teaches an apparatus and method for constraining the value of feedback filter.
- Biru U.S. Pub No 2002/0172275 A1 teaches a two-stage equalizer for trellis-coded systems.
- Gosh et al U.S. Pub No 20020154247 A1 teaches a system and method for reducing error propagation in a decision feedback equalizer.
- Ueda U.S. Patent NO 5,787,118 teaches an adaptive equalizer.

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Wittig et al U.S. Patent No 6,823,489 B2 teaches a generation of decision feedback equalizer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571 272 2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Emmanuel Bayard Primary Examiner Art Unit 2611

ANUEL BAYARD

5/24/06